

FIG. 1

201

$$[Ad] \times [Rk] = [Tk]$$

203

202

FIG. 2

301

$$\begin{matrix} d=3 \\ \begin{bmatrix} a_{11} & a_{12} & a_{1d} \\ a_{21} & a_{22} & a_{2d} \\ a_{31} & a_{32} & a_{3d} \\ a_{n1} & a_{n2} & a_{nd} \end{bmatrix} \end{matrix}$$

302

\times

$$\begin{matrix} k=2 \\ \begin{bmatrix} r_{11} & r_{1k} \\ r_{21} & r_{2k} \\ r_{d1} & r_{dk} \end{bmatrix} \end{matrix}$$

303

$=$

$$\begin{matrix} n=4 \\ \begin{bmatrix} t_{11} & t_{1k} \\ t_{21} & t_{2k} \\ t_{31} & t_{3k} \\ t_{n1} & t_{nk} \end{bmatrix} \end{matrix}$$

303

FIG. 3

$$\begin{aligned} t_{11} &= a_{11}r_{11} + a_{12}r_{21} + \dots + a_{1d}r_{d1} \\ t_{1k} &= a_{11}r_{1k} + a_{12}r_{2k} + \dots + a_{1d}r_{dk} \\ t_{21} &= a_{21}r_{11} + a_{22}r_{21} + \dots + a_{2d}r_{d1} \\ t_{2k} &= a_{21}r_{1k} + a_{22}r_{2k} + \dots + a_{2d}r_{dk} \\ t_{31} &= a_{31}r_{11} + a_{32}r_{21} + \dots + a_{3d}r_{d1} \\ t_{3k} &= a_{31}r_{1k} + a_{32}r_{2k} + \dots + a_{3d}r_{dk} \\ t_{n1} &= a_{n1}r_{11} + a_{n2}r_{21} + \dots + a_{nd}r_{d1} \\ t_{nk} &= a_{n1}r_{1k} + a_{n2}r_{2k} + \dots + a_{nd}r_{dk} \end{aligned}$$

304

$$\begin{aligned}
 & \begin{matrix} n=3 & d=6 \\ \begin{bmatrix} 5 & 7 & 3 & 2 & 4 & 6 \\ 1 & 4 & 9 & 7 & 2 & 8 \\ 2 & 5 & 6 & 3 & 7 & 4 \end{bmatrix} \end{matrix} & \times & \begin{matrix} d=6 & k=3 \\ \begin{bmatrix} -1 & 1 & 1 & 1 \\ -1 & -1 & 1 & 1 \\ 1 & -1 & -1 & -1 \\ 1 & -1 & 1 & 1 \\ -1 & 1 & 1 & 1 \\ 1 & -1 & -1 & -1 \end{bmatrix} \end{matrix} & = & \begin{matrix} 501 & 502 \\ \begin{bmatrix} -5+ & -7+ & 3+ & 2+ & -4+ & 6 & 5+ & -7+ & -3+ & -2+ & 4+ & -6 & 5+ & 7+ & -3+ & 2+ & 4+ & -6 \\ -1+ & -4+ & 9+ & 7+ & -2+ & 8 & 1+ & -4+ & -9+ & -7+ & 2+ & -8 & 1+ & 4+ & -9+ & 7+ & 2+ & -8 \\ -2+ & -5+ & 6+ & 3+ & -7+ & 4 & 2+ & -5+ & -6+ & -3+ & 7+ & -4 & 2+ & 5+ & -6+ & 3+ & 7+ & -4 \end{bmatrix} \end{matrix} \\
& \begin{matrix} 504 & k=3 \\ \begin{bmatrix} -5 & -9 & 9 \\ 17 & -25 & -3 \\ -1 & -9 & 7 \end{bmatrix} \end{matrix} & = & \begin{matrix} n=3 & k=3 \\ \begin{bmatrix} -5 & -9 & 9 \\ 17 & -25 & -3 \\ -1 & -9 & 7 \end{bmatrix} \end{matrix} & & \begin{matrix} 503 \\ \end{matrix}
 \end{aligned}$$

FIG. 5

[illegible]

$$\begin{matrix} \text{n=3} & & \text{d=6} \\ \begin{bmatrix} 5 & 7 & 3 & 2 & 4 & 6 \\ 1 & 4 & 9 & 7 & 2 & 8 \\ 2 & 5 & 6 & 3 & 7 & 4 \end{bmatrix} & \times & \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ -1 & -1 & -1 \\ -1 & -1 & -1 \\ -1 & -1 & -1 \end{bmatrix} & = & \end{matrix} \quad \begin{matrix} \text{k=3} \\ \text{d=6} \end{matrix}$$

$$\begin{aligned}
 & \begin{bmatrix} 5+ & 7+ & 3+ & -2+ & -4+ & -6 \\ 1+ & 4+ & 9+ & -7+ & -2+ & -8 \\ 2+ & 5+ & 6+ & -3+ & -7+ & -4 \end{bmatrix} \quad \begin{matrix} \nearrow \\ 604 \end{matrix} \\
 & = \quad n=3 \quad \begin{matrix} k=3 \\ \nwarrow 603 \end{matrix} \quad \begin{bmatrix} 3 & 3 & 3 \\ -3 & -3 & -3 \\ -1 & -1 & -1 \end{bmatrix} \\
 & \begin{bmatrix} 5+ & 7+ & 3+ & -2+ & -4+ & -6 & 5+ & 7+ & 3+ & -2+ & -4+ & -6 \\ 1+ & 4+ & 9+ & -7+ & -2+ & -8 & 1+ & 4+ & 9+ & -7+ & -2+ & -8 \\ 2+ & 5+ & 6+ & -3+ & -7+ & -4 & 2+ & 5+ & 6+ & -3+ & -7+ & -4 \end{bmatrix}
 \end{aligned}$$

FIG. 6

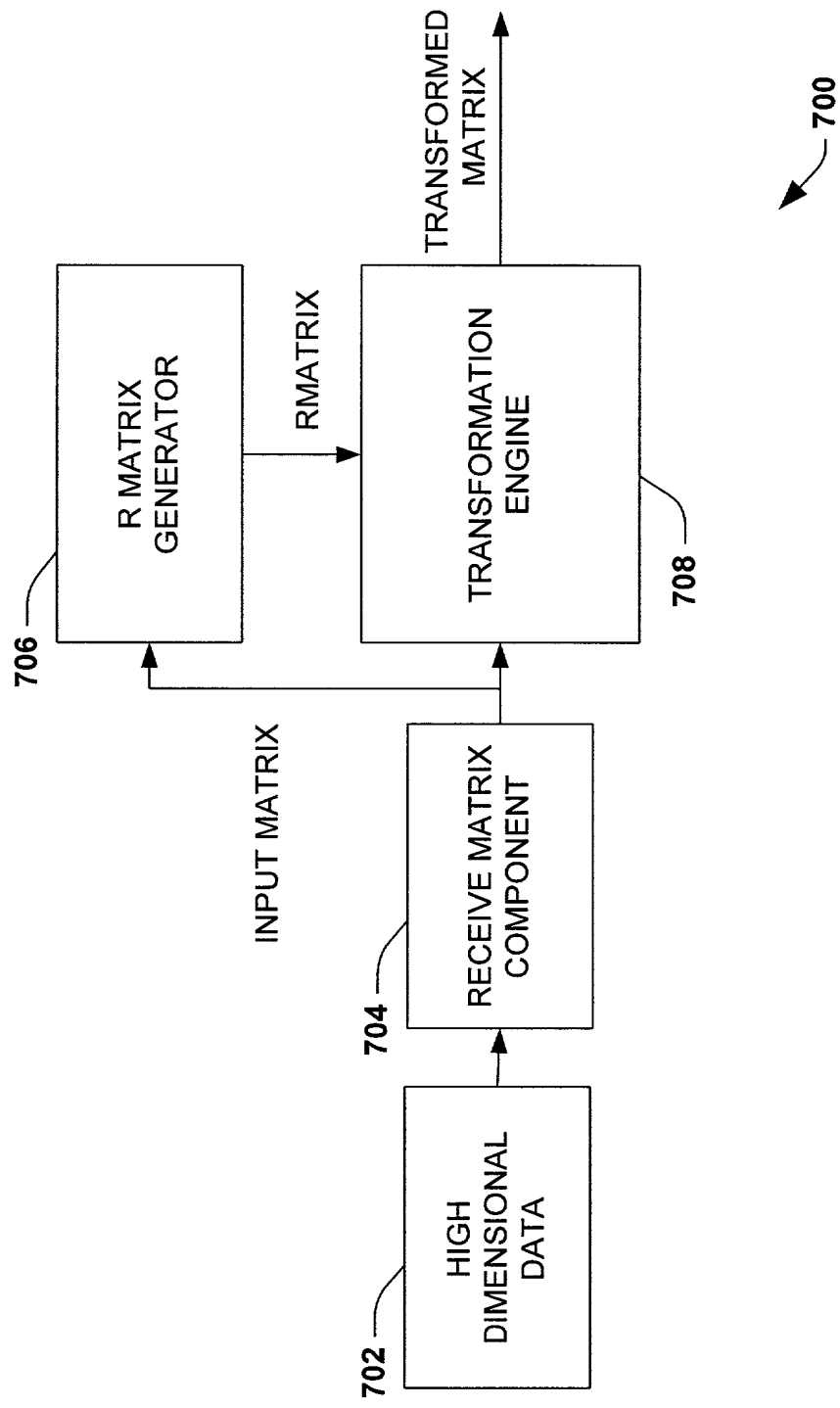


FIG. 7

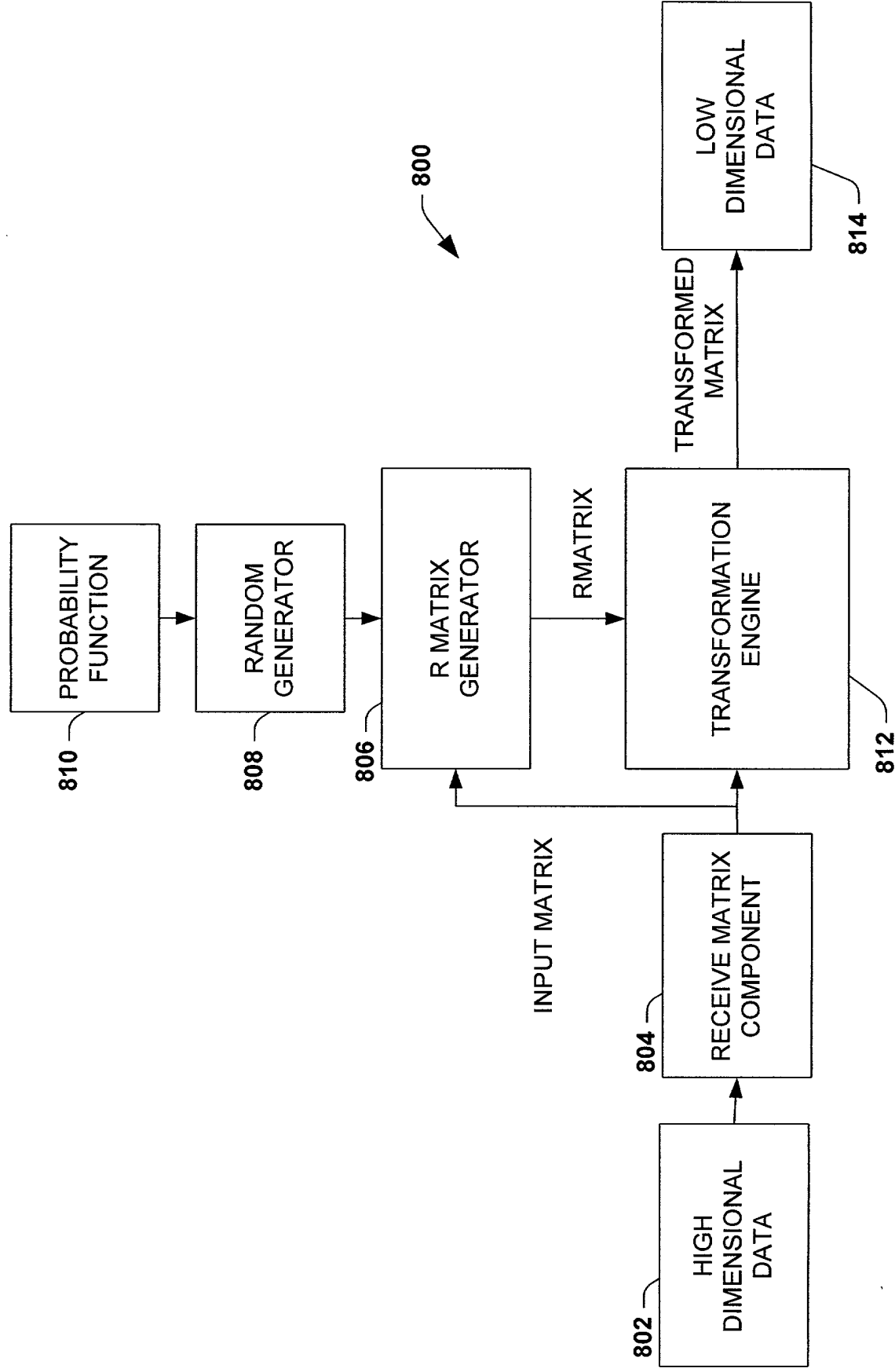


FIG. 8

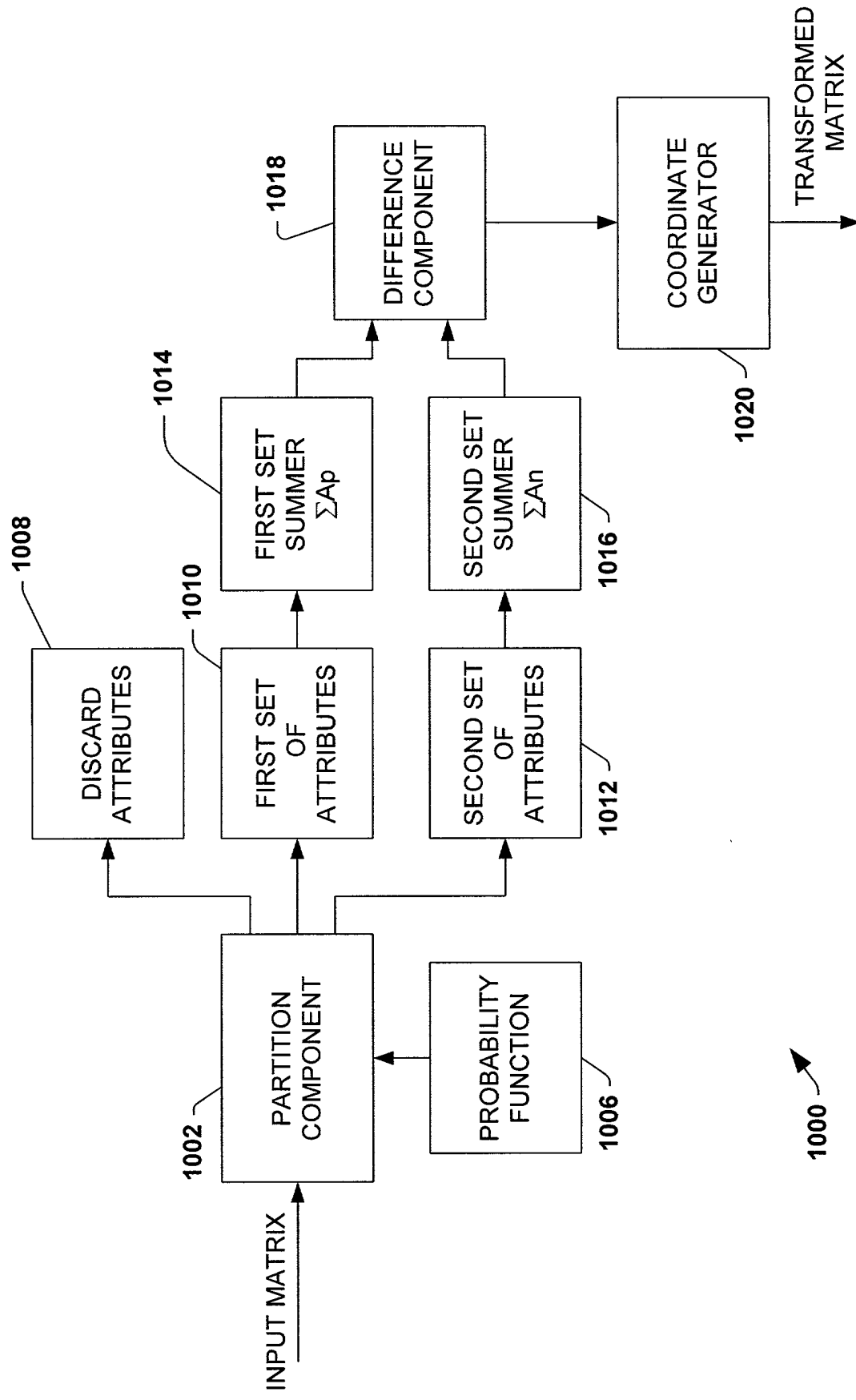


FIG. 10

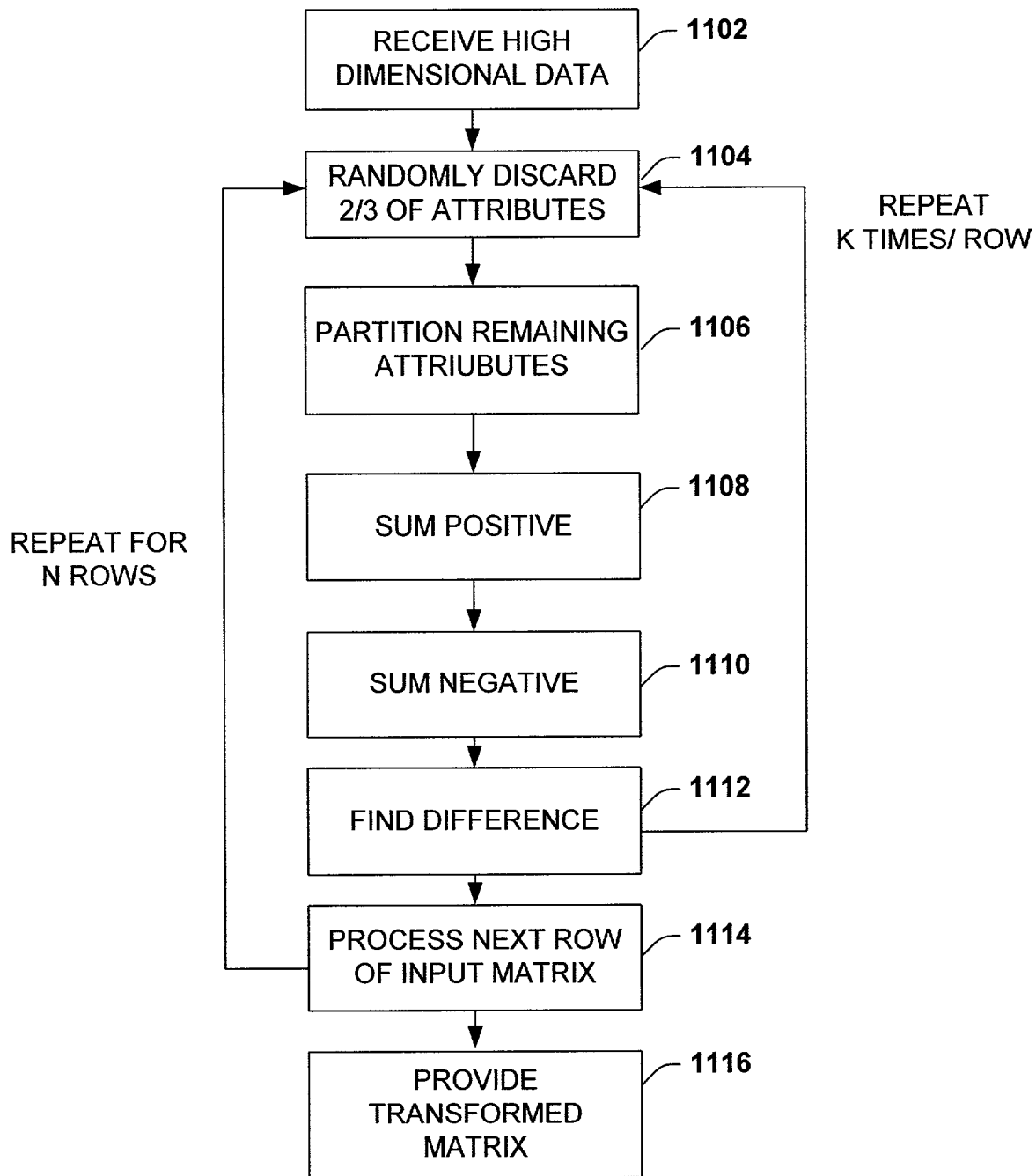


FIG. 11

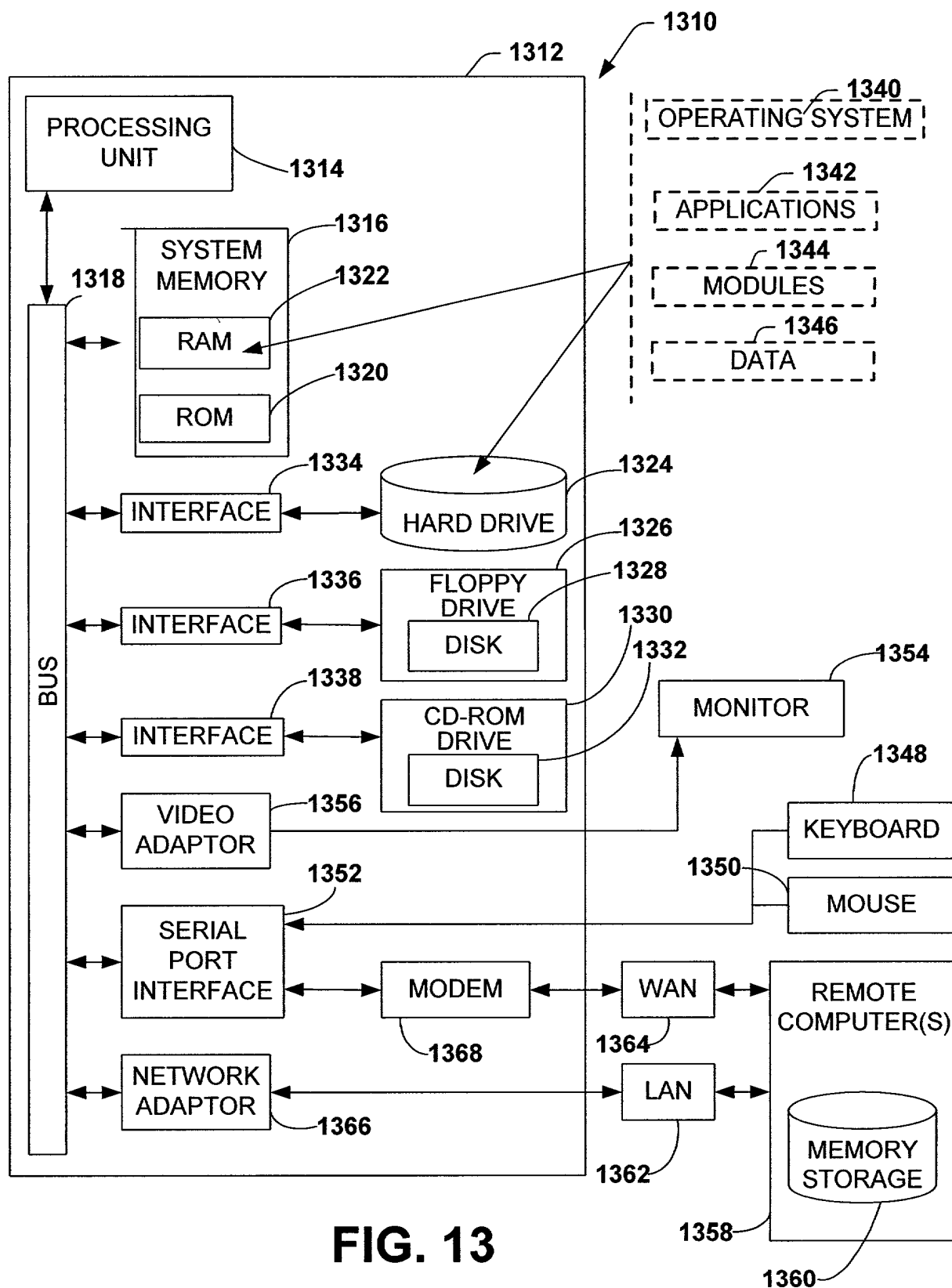


FIG. 13

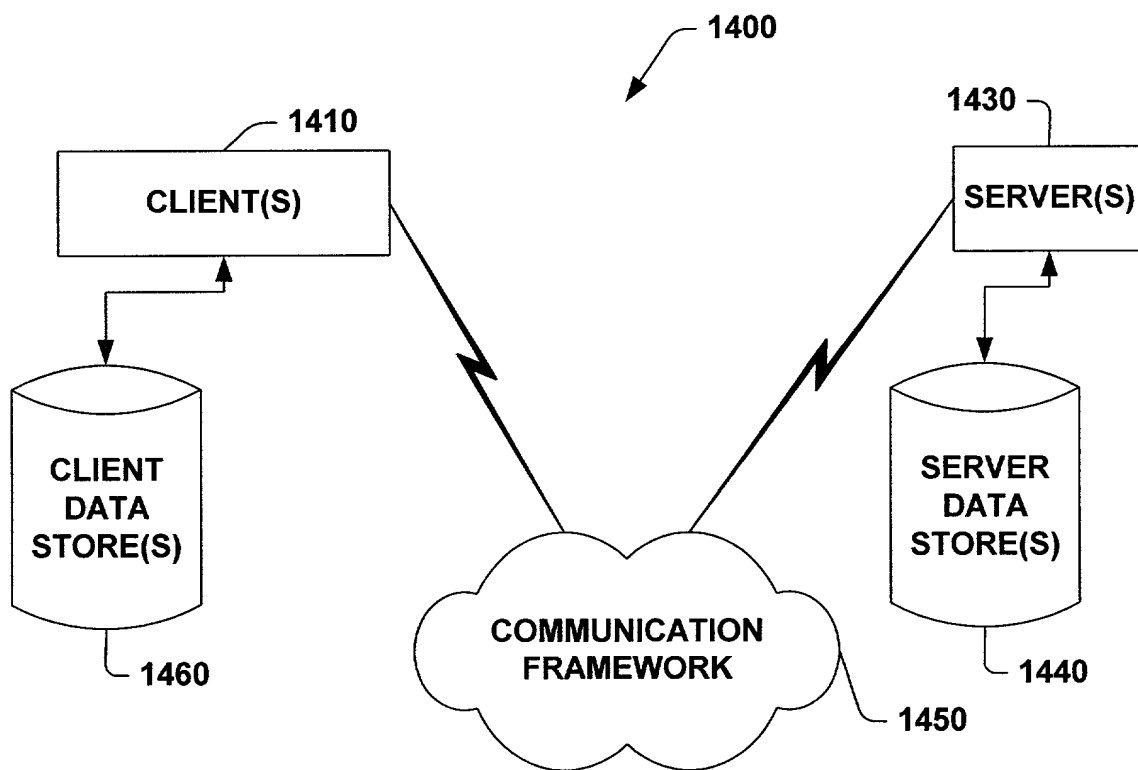


FIG. 14